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ABSTRACT

In Tucson, the Arizona Center for Early Childhood Education has developed an experimental program (EP) of teacher reeducation aimed at modification of curriculum emphases, classroom practices, and pedagogical orientation of teachers. This study of incentive practices in both EP and NP (nonprogram) classrooms indicated the superiority of the EP practices. Two studies compared pedagogical attitudes of EP and NP teachers regarding classroom application of contemporary principles and the needs and nature of disadvantaged youngsters. In the first study, inculcation of EP attitudes was effected indirectly through classroom interaction with specially trained EP personnel. Attitudes were measured by a 75-item Survey of Educational Attitudes (SEA). The second study examined a 6-week intensive workshop training project, also evaluated by SEA. In both studies the EP teachers had substantially and consistently acquired the desired EP viewpoint. Long-term diffuse and short-term intensive training produced significant modification of teacher's pedagogical convictions. (MH)

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PEDAGOGICAL ATTITUDES OF CONVENTIONAL AND SPECIALLY-TRAINED TEACHERS

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With pressing social demands to equalize educational opportunities for all Americans, numerous efforts are being made to develop new programs to better serve the underprivileged segments of society. Although many such attempts have received federal support and national attention, it is crucial to demonstrate that educational innovations have, indeed, made contributions concordant with their intended goals. In collaboration with Tucson School District I, the Arizona Center for Early Childhood Education has been developing a program of teacher reeducation. The goals of this experimental program (EP) are the modification of curricular emphases, classroom practices, and pedagogical orientations of teachers, with particular focus upon the beginning school years for culturally disadvantaged children. The EP evolved from evidence that large numbers of economically deprived Mexican-American youngsters were dropping out early in the scholastic process, and were thereby precluding themselves from acquiring skills requisite to effective and rewarding participation in the general society.

The scope of the EP is broad. Its instructional aims and procedures are elsewhere described (Henderson, Hughes, and Wetzel, 1968; Hobson, 1968; Wetzel, 1968).[1] Another main concern is motivational: to endow the early school years with sufficient positive valence that culturally disadvantaged students will become favorably disposed to the academic milieu, as a first step toward establishing their willing participation in the educational process. Recently, Rosenthal, Underwood, and Martin (in press) compared the incentive practices of 64 EP classrooms with 91 conventional, non-program (NP) classrooms. This observational study revealed that, at high levels of statistical significance, EP classrooms were characterized by higher incidence of approval from teachers, by more frequent spontaneous student solicitation of teacher attention, and by less teacher censure of students, than were observed in the NP classrooms. Further, the same pattern of results was obtained when EP and NP classrooms were compared within higher and lower socioeconomic levels separately, and even when the (predominantly) lower socioeconomic level EP rooms were compared with conventional rooms of higher socioeconomic composition.

The present studies compared the pedagogical attitudes of EP and NP teachers regarding classroom applications of contemporary reinforcement (e.g., Bijou and Baer, 1961, and 1965; Keller, 1954) and social-learning (e.g., Bandura and Rosenthal, 1966; Bandura and Walters, 1963) principles, and regarding the needs and natures of culturally disadvantaged

youngsters. To our knowledge, this is the first report providing normative, large-sample data on these matters as viewed by grammar-school teachers. It should be noted that the main group of EP teachers did not receive specific tutelage on the topics involved. Instead, the philosophy of the EP was conveyed and exemplified (for at least one year) by special EP resource personnel, one of whom was assigned to work with teachers at each school that participated in the EP. In addition, however, evidence is presented that short-term, intensive retraining can effectively modify such pedagogical convictions.

Study I. Diffuse Long-Term EP Effects on Attitude

Method

Subjects

Although participation was voluntary, anonymous self-report data were solicited from every regular teacher (excluding short-term substitutes) of grades one through six in the school district. The results are based on 879 teachers who returned the attitude survey, although not all teachers answered every item. The main analyses are based on a minimum of 825 respondents (on item 10), and the results for all but four of 75 items are based on at least 850 cases. Each of the 67 EP teachers completed the attitude survey, as did 812 NP teachers. Taken together, the sample reflects just under 90 per cent of elementary-grade teachers in the entire school district.

The Survey of Educational Attitudes (SEA)

Since no extant instrument had appeared suitable for present purposes, a 75-item SEA was constructed. Items were devised to be of general pedagogical interest, but to reflect thephilosophical emphases of the EP. All items were cast in the form of positive assertions, to which teachers could respond on the same 10-point Likert-type rating scale which ranged from strong agreement to strong disagreement. The EP's philosophy concurred with some, and disagreed with others, of these assertions. Table 1 presents the SEA items with the pedagogical orientation of the EP provided (after each item-number by "a" for agreement or "d" for disagreement with the EP philosophy).

Insert Table 1 About Here

Items were preceded by a cover sheet that requested some brief demographic information, and apologized for the use of an answer sheet (to facilitate statistical analysis). The answer sheet contained the same 10-point scale already described, with spaces for recording the teacher's ratings of each item.

Procedure

Appropriate numbers of SEA booklets were brought to, and later collected from, the principal of each elementary school in the district. All principals were individually contacted, at which time the collection

arrangements and the importance of the research were discussed. Principals were encouraged to stress the anonymous nature of the SEA, and asked to provide a box or envelope (in the receptionist's office) into which teachers could place completed surveys; this device was intended to enhance the perception of anonymity by preventing the principal from visually identifying the respondent who returned a given booklet. Principals were asked to inform their teachers of the voluntary nature of participation, but to urge their cooperation so that outcome results would give a complete and representative picture. Finally, a date (usually four days after distribution) was set for pickup of the completed booklets. It is felt that these arrangements contributed materially to the very high percentage of teacher participation obtained.

Results[2]

The main results are presented in Table 2 which gives the correlation of each item with the entire composite (r_{iT}), the attitude means and standard deviations of the total sample for each item and the entire composite, and presents the means for EP and NP groups separately, with the one-way analyses of variance comparing the groups on each item and the entire survey. Items were so scored that the higher the mean value, the greater the agreement with EP philosophy (see Footnote 2).

Insert Table 2 About Here

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Inspection of Table 2 reveals substantial and consistent differences indicating that EP teachers had, indeed, acquired the viewpoint of the EP. On 76 comparisons, EP teachers scored significantly higher than NP teachers in 60 instances; of the nonsignificant comparisons, EP teachers' scores were in the direction of greater accord with the EP viewpoint than were NP teachers in 11 instances. The direction of respective group opinion was reversed on only four items, but none of these reversals approached significance (largest $\underline{F} = 2.32$; $\underline{df} = 1/863$; $\underline{p} > .12$). Over the entire item-composite, the EP teachers' aggregate scores were strongly more concordant with EP philosophy than were the scores of NP teachers ($\underline{F} = 94.68$; $\underline{df} = 1/877$; $\underline{p} < .0001$). It, thus, seems clear that, without specific tutelage, the demand characteristics of the EP had effectively created a pronounced attitude disposition. This effect appears to be an example of what Martin, Burkholder, Rosenthal, Tharp, and Thorne (1968) have discussed in the following terms: "Often the behavioral engineer must set goals which he cannot make precisely explicit or contingent, and he may deal with this by creating a stimulus field whose operative forces dispose action in the desired directions along multiple, and partially overlapping, dimensions." (p. 382)

It is of interest to examine the conceptual content of the 19 items whose correlations with the total composite were highest ($\underline{r}_{iT} \geq .37$). On all but one of these (item 55), EP teachers scored significantly higher than NP teachers in the direction of EP philosophy. These items fell into four

rough categories which, phrased in accord with the goals of the EP, were as follows: encouraging free acces to, and exploration of, a wide range of material and experience despite considerations of tidyness or uniformity (items 13, 17, 20, 63, and 69); emphasizing motivational over practice factors in shaping school performance and ultimate, rather than immediate, acquisition (items 37, 40, 44, 45, 50, 53, 58, and 74); discouraging the repetition of grades and grade-placement based on judgments of innate intelligence or "maturational" readiness (items 22, 24, 38, 55, and 64); discouraging use of censure and criticism as guidance devices (item 47).

Demographic Variables

The cover sheet of the SEA requested demographic information from the teachers regarding years of teaching experience, socioeconomic level of respondent's present students, and socioeconomic level of students typical in respondent's teaching experience. It is germane to consider the attitude correlates of these factors. Since a small fraction of teachers omitted these data, analyses are based on respondents who provided the required information.

When the attitude responses of teachers with nine or fewer years of experience (n = 433) were compared with those of teachers having ten or more years of experience (n = 447), the newer teachers proved to agree more with the EP philosophy; significant differences were found on items

1, 5, 11, 13, 15, 18, 23, 30, 33, 34, 37, 38, 45, 47, 53, 55, 59, 70, and 75 (smallest $\underline{F}$ = 3.89; $\underline{df}$ = 1/864; $\underline{p} < .05$), although not found on the aggregate scores; borderline trends ($\underline{p} < .065$) in the same direction were found on items 8, 18, 34, and 64, with significant reversals of this pattern on items 10, 27, 40, and 62 (smallest $\underline{F}$ = 5.31; $\underline{df}$ = 1/868; $\underline{p}$ = .02), but no borderline trends. Because these results had not been specifically hypothesized in advance, interpretation of the dominant pattern remains speculative. However, one might conjecture that teachers with less experience, and hence more recently trained, had undergone greater exposure to current, environmentalistic, biases in behavioral science than had the more experienced teachers, trained during an epoch of stronger constitutional and maturational orientation.

Of greater relevance to present concerns was the economic composition of a teacher's class from which, presumably, she would draw her conclusions regarding culturally disadvantaged students. The aggregate scores of teachers whose past career experiences had typically involved lower-income groups ($\underline{n}$ = 381; mean = 2,647.74) showed greater agreement with the EP philosophy than did teachers whose usual classes had been of higher economic composition ($\underline{n}$ = 484; mean = 2,578.39); the difference between means proved quite significant ($\underline{F}$ = 10.25; $\underline{df}$ = 1/863; $\underline{p} < .002$). The aggregate scores of teachers presently working with children from lower income families ($\underline{n}$ = 397; mean = 2,671.70) also agreed more with the EP

philosophy than did teachers currently working with students from higher income backgrounds (n = 463; mean = 2,556.95); once again, the mean difference between teacher groups proved highly significant (F = 28.72; df = 1/858; p < .0001).

However, it must be recalled that both the present and past experience of EP teachers was, very strongly, based on contact with students of lower economic composition. Among the 67 EP teachers, 52 (78 per cent) had typical past experiences with lower income groups, and 65 (97 per cent) were presently working with underprivileged students. In light of the pronounced effects already discussed, revealing greater agreement with EP philosophy by EP teachers, to combine EP with conventional teachers would act to artificially inflate the attitudes of the entire group of teachers now or formerly involved with culturally disadvantaged youngsters toward agreement with the EP philosophy. It was, therefore, necessary to perform analyses on the NP group separately, with EP teachers excluded.

When NP teachers whose past experience had been with students from lower income families (n = 329) were compared with NP teachers of higher economic groups (n = 468), no significant difference in aggregate attitide scores was found (F = 2.20; df = 1/795; p > .13); although teachers who had, in the past, worked with lower economic groups tended toward greater agreement with the EP, it appeared that the significant prior finding had, mainly, resulted from the inclusion of EP teachers. However, NP teachers

presently working with lower economic groups (n = 332, mean = 2,617.12) displayed considerably greater aggregate agreement with EP philosophy than did teachers of higher income groups (n = 460; mean = 2,555.06). The difference between these means proved significant (F = 8.08; df = 1/790; $p < .005$), and indicated that present contact with children of lower economic background had, without particular training, resulted in greater teacher agreement with the philosophy of the EP.

Taken together, these socioeconomic-level results appear to indicate that, without training, ongoing contact with culturally disadvantaged youngsters led teachers to induce attitudes in general concordance with EP philosophy but of lower intensity than was accomplished through teacher retraining. It further appeared that, without maintaining such attitudes by continued training, when teachers stopped working with underprivileged children, teacher attitudes became statistically indistinguishable from those of colleagues accustomed to working with middle- and upper-class youngsters.

Study II. Intensive Short-Term EP Effects on Attitude

Method

During the summer of 1968, as part of the national Follow-Through program, 24 teachers (from 14 school districts throughout the country) were given six weeks' intensive training in the philosophy and teachniques of the EP. It should be noted that this training was not comparable to that given the EP teachers of Study I. Instead, the summer workshop was designed to

equip participants for a consultant role in their school districts, analogous to the role of the special resource personnel who had assisted the EP teachers of Study I. Therefore, the summer group received more abstract, intensive, and technical instruction than had the EP teachers of Study I; in addition, the summer group spent approximately half their time observing and emulating the classroom practices of the most expert of the experienced EP teachers. The summer group consequently benefited from the accomplished end-product of the EP, which had required some three years of development.

The SEA was administered to the 24 fledgling consultants before and after their summer training; in addition, a control group of 34 teachers was randomly selected from among those taking summer session courses at the University of Arizona. Control teachers completed the SEA only at the time of its readministration to the experimental trainees; the two groups appeared roughly comparable in age and sex.

Results

When the aggregate scores of the experimental group's initial SEA were compared with control group scores, no difference approaching significance was found ($p > .25$); both groups were, therefore, comparable in their original pedagogical beliefs. After training, however, the experimental group's opinions differed markedly from the control group's aggregate attitudes ($F = 69.45$; $df = 1/56$; $p < .0001$), indicating that training had,

indeed, brought the experimental group into closer accord with the EP philosophy. After training, the experimental group revealed significantly greater agreement with the EP viewpoint on items 1, 11, 13, 17, 18, 19, 21, 22, 24, 26, 28, 29, 31, 33, 36, 38, 40, 44, 47, 49, 51, 52, 53, 58, 59, 63, 64, 65, 66, 67, 68, 69, 73, 74, and 75 (smallest $\underline{F} = 4.03$; $\underline{df} = 1/46$; $\underline{p} < .05$).

Further, when the initial and final aggregate scores of the experimental group were compared, there was again revealed a powerful effect showing change toward the philosophy of the EP by a repeated-measures analysis of variance ($\underline{F} = 112.88$; $\underline{df} = 1/23$; $\underline{p} < .0002$).

It appeared striking that, after six weeks of intensive training, the experimental group could enunicate the EP viewpoint almost as well as could the teachers of Study I, who had received, for a considerably longer duration, more diffuse instruction through exemplification and guidance by the EP school resource personnel.

Discussion

It is of interest that both long-term diffuse, and short-term intensive training produced substantial modification of teachers' pedagogical convictions. Recent research on experimenter effects has concluded that the expectations of the researcher can markedly influence the outcome of laboratory studies (Rosenthal, 1963 and 1964), and that teachers' expectations of student achievement (Rosenthal and Jacobson, 1968). In this regard, the

differences between EP and NP teachers on such matters as the malleability of youngsters' constitutional endowment (e.g., items 4, 8, 9, 56, 61, and 64), and the concrete needs of children culturally disadvantaged or otherwise scholastically deficient (e.g., items 7, 17, 24, 38, 44, 45, 50, 58, and 69) might be expected to generate quite different classroom atmospheres. The import of the EP philosophy might well be expected to create greater optimism about the possibility of improving scholastic prowess, and greater reliance upon active environmental stimulation to foster such improvement, than would be suggested by the beliefs of conventional teachers. Further, EP teachers revealed greater willingness to tolerate the messiness and disorder (e.g., items 13, 20, 26, 31, 39, 63, and 72) which may be unavoidable prerequisites to student exploration of the school environment.

Cohen (1964), Festinger (1964), and Greenwald (1965) have questioned the degree of relationship between professed attitude and actual behavior. Although no evidence is available for the summer training group, considerable data, already discussed, on the classroom incentive practices of the EP teachers of Study I revealed that, in fact, they were implementing their attitudes by pedagogical actions in accord with the EP, and quite different from the classroom behavior of conventional teachers (Rosenthal, Underwood, and Martin, in press).

It appears encouraging to find this consonance between the beliefs and actual performance of the EP group. Also encouraging was the finding

that, without specific training, teachers engaged in direct encounter with culturally disadvantaged youngsters displayed more optimistic perceptions of the likelihood of aiding such students than did teachers who were working with students from higher socioeconomic strata. It may be that some aspect(s) of contact with economically underprivileged children is, itself, an educative experience for teachers. However, the present results caution that the effects of contact with underprivileged children may dissipate once a teacher is transferred to a different student population, whereas such attitude changes may be further augmented and consolidated by continued training like that provided in the EP.

References

Bandura, A., & Rosenthal, T. L. Vicarious classical conditioning as a function of arousal level. Journal of Personality and Social Psychology, 1966, 3, 54-62.

Bandura, A., & Walters, R. H. Social learning and personality development. New York: Holt, Rinehart, & Winston, 1963.

Bijou, S. W., & Baer, D. M. Child development I, a systematic and empirical theory. New York: Appleton-Century-Crofts, 1961.

Bijou, S. W., & Baer, D. M. Child development II, universal stage of infancy. New York: Appleton-Century-Crofts, 1965.

Cohen, A. Attitude change and social influence. New York: Basic Books, 1964.

Festinger, L. Behavioral support for opinion change. Public Opinion Quarterly, 1964, 28, 404-417.

Greenwald, A. Behavior change following a persuasive communication. Journal of Personality, 1965, 33, 370-391.

Henderson, R. W., Hughes, M. M., & Wetzel, R. J. The Tucson early education model. Paper presented at the Atlanta City Conference for Follow-Through Consultants, Atlanta, October, 1968.

Hobson, A. B. Rationale and primary focus of the Hughes' model: language development; room arrangement; intellectual kit. In P. Williams (Chm.), Ideas and issues: education of disadvantaged youth in the early years. Symposium presented by the Maryland State Department of Education, Baltimore, August, 1968.

Keller, F. S. Learning: reinforcement theory. New York: Random House, 1954.

Martin, M., Burkholder, R., Rosenthal, T. L., Tharp, R. G., & Thorne, G. L. Programming behavior change and reintegration into school milieu of extreme adolescent deviates. Behavior Research and Therapy, 1968, 6, 371-384.

Rosenthal, R. On the social psychology of the psychology experiment: the experimenter's hypothesis as unintended determinant of experimental results. American Scientist, 1963, 51, 268-283.

Rosenthal, R. The effects of the experimenter on the results of psychological research. In B. A. Maher (Ed.) Progress in experimental personality research. New York: Academic Press, 1964, Pp. 80-114.

Rosenthal, R., & Jacobson, L. Pygmalion in the classroom: teacher expectation and pupils' intellectual development. New York: Holt, Rinehart, and Winston, 1968.

Rosenthal, T. L., Underwood, B., & Martin, M. Assessing classroom incentive practices. Journal of Educational Psychology, in press.

Wetzel, R. J. A cooperative effort of university researchers and public schools in the development of an early childhood education program. In M. Jessen (Chm.), Human development, comprehensive early childhood education. Sympositum presented by the Bureau of Indian Affairs, Albuquerque, March, 1968.

Footnotes

[1]Copies of the cited material may be obtained by writing to the Arizona Center for Early Childhood Education, College of Education, University of Arizona, Tucson, Arizona 85721.

[2]All significance levels reported in this paper are based on two-tailed probability estimates. To permit comparisons among teacher groups, all items were scored such that the direction in concordance with the philosophy of the experimental program was assigned the higher scale values; (whereas, on the raw ratings, higher values had indicated respondent's agreement, and lower values his disagreement, with the given assertion). Therefore, on items where disagreement accorded with the EP philosophy (denoted by 'd' in Table 2), the scale values reported have been reversed in direction. On such items, one may determine the raw means by subtracting the value reported from 55; for example, if the 'd' item-mean is reported as 40, the actual raw value obtained was (55 - 40) = 15.

Table 1

SEA Items By Number

1d. Dedicated teachers determine the potential of their students and plan school programs to provide for this level of potential.

2a. One learns to speak a language through actual practice in conversation.

3a. The greatest gains in language development take place in natural life-situations that require speaking.

4d. Children from impoverished homes usually inherit the lower intelligence of their families.

5a. A child learns to communicate through interaction with other people.

6d. The slum child usually comes to school with more curiosity than his middle-class peers.

7d. The slum child's own language is adequate for hisneeds in the community where he will live.

8d. Gaps in knowledge and skills must be closed before additional learning can take place.

9a. The school can provide experiences that will aid the child to grow both in intelligence and curiosity.

10a. The school should provide all children, whatever their backgrounds, with the skills and abilities needed to participate in our technilogical society.

11d. Students should be required to use correct English at all times.

12a. Schools must provide an environment in which every child can meet frequent success.

13d. Getting into things, opening things up, handling objects and making a mess indicate a lack of parental discipline of the child.

14d. Visiting in pupils' homes is regarded as an intrustion by parents, and often does more harm than good.

15d. Giving extra time to particular students is an unfair practice on the part of the teacher.

16d. If children are doing an activity together, the entrance of any adult into the activity will interfere with and frustrate them.

17d. A child from an underprivileged home most needs a highly structured program until he gains control in the school situation.

18d. Because they know it is their one chance for personal advancement, most underprivileged children are eager to acquire an education.

19d. Imitating the responses and work-efforts of others will probably retard the child's development of his own abilities.

20d. A wide-range of materials and activities in the primary grade classroom tends to create a confused and disorganized environment for the child.

21a. Children can learn about success only by having the personal experience of succeeding.

22d. Repeating a grade often relieves the pressure on a student and gives him another year to catch up to grade level.

23d. Before their first school experience, most underprivileged children have learned from older children that school is an interesting place and anticipate favorably coming to school.

24d. If a young child is found to be too immature to perform well in first grade work, it is best to delay his school entrance another year.

25a. A child's intellectual development mainly results from his past experiences.

26a. Through interaction with his environment, the child develops his intellectual skills.

27d. Children from lower economic areas are more apt to be physically fit than children from middle-class homes.

28a. Most lower-class mothers spend less time talking to their children than do middle-class mothers.

29a. Our ways of organizing, combining, and forming ideas and concepts are learned.

30a. Teacher-training programs should devote more time to skills needed for interaction with children, and less time to the structure and organization of subject matter.

31a. Intelligence is a set of skills by which a person receives and processes information from the environment.

32d. The biggest deficit of the underprivileged, Mexican-American child lies in his lack of language skills.

33d. Slum children are more like middle-class children at fifth grade (after several years of schooling) than when they enter school.

34a. To a crucial degree, children learn by imitating other people.

35a. Children learn a great deal from the words and deeds of their peers.

36d. Teachers can help improve the oral language of children by making them aware of the differences between their home-language and standard English.

37a. A child's concept of himself is a crucial factor of his daily school behavior.

38d. Homogeneous ability grouping protects slow learners from excessive competition and lets them develop at their own rates.

39a. The belief that a child can cope with his environment merits the use of school time to foster this belief.

40d. The first school tasks of a child should be practice in reading and writing the language.

41d. The teacher can often deal in a less partial, less prejudiced manner if he is not aware of a child's home background.

42a. The teacher should plan experiences that will help the disadvantaged child identify things of value in his own environment.

43a. Language growth depends heavily upon the amount of speaking the child engages in.

44d. Preschool programs for underprivileged children should stress preparing them to meet the demands of the school situation.

45d. It would be helpful if the parents of underprivileged children could be taught how best to avoid interfering with the school curriculum.

46a. The child's own view of himself mainly derives from the attitudes of those people in his environment who are important to him.

47d. Children must be made aware of their mistakes before they can correct them.

48a. Concrete praise (e.g., "Your writing makes it easy for us to read your work.") leads to more desirable change in behavior than does general praise (e.g., "That is good.").

49a. Attaching specific labels to the child's desirable and undesirable actions helps the child to analyze and understand his successes.

50d. If a child is permitted to use his first language for expressing himself, it will be very hard for him to become fluent in a second language.

51a. By imitating the teacher's model of correct language usage, the development of language skills is accelerated.

52d. Recognizing his scholastic strengths and weaknesses is a pupil's first step toward improvement.

53d. Since knowledge is acquired in sequence, teaching must be structured according to the order dictated by the particular materials.

54a. Children can be taught how to think.

55d. Like limited intelligence, a lack of curiosity is often inherited by children of lower-class families.

56a. A child's curiosity results from past experiences which encourage, ignore, or stifle it.

57a. The child who is proud of his own work tends to be proud of the work of other children.

58d. Special preschool classes to teach standard English, and accustom the child to classroom discipline, would be a good way to assist underprivileged groups.

59d. It is impractical to believe that we can actually individualize teaching.

60a. Cognitive development depends upon the requirements of the child's environment.

61d. By the time a child is six years old, it is probably too late to influence his learning ability to any important degree.

62a. A child learns best to communicate when there is tangible purpose or practical reason for communication.

63d. There is great value in having children behave in similar ways and follow similar procedures.

64d. Intellectual capacity is inherited and mainly fixed at birth.

65a. One of the most important functions provided by adults is serving the child as models for the use of language.

66d. Maturation is the major determinant of a child's level of physical and intellectual development.

67d. Practice in mastering new skills should be postponed entirely until the child gives evidence of "developmental readiness" for the activity.

68d. A teacher's efforts to expand and extend a child's use of the language usually make him feel that his present language efforts are being criticized.

69d. The introduction of novel experiences acts to tax and overburden the child's capacity to adjust.

70d. Teachers of young children from lower-class homes must provide frequent rest-periods, since these youngsters tire more easily than peers from the new demands of schooling.

71a. Children feel free to speak only if their attempts are accepted and valued.

72d. If children reach toward, tug at, or otherwise try to gain the attention of visitors to the classroom, this suggests that the teacher does not have adequate control of the class.

73d. Education should provide students with instruction that will help them to adjust and succeed in their own environments.

74d. The sooner that reading, writing, and quantitative skills are introduced, the sooner will children master them.

75a. The ideal group size for a teaching activity is five or fewer students per teacher.

Note: The philosophy of the EP toward item-content is represented by "a" (for agreement) or "d" (for disagreement) placed after the item number.

Table 2

Main Results by SEA Item for Total Sample and EP Versus NP Groups Separately

Item No.	r_{iT}	Total Means	Total S.D.s	EP Means	NP Means	F
1d.	.14	13.01	10.88	14.46	12.90	1.24
2.	.15	46.13	5.74	48.43	45.94	11.76***
3.	.24	45.04	6.95	47.99	44.80	13.19***
4d.	.30	37.43	13.30	41.29	37.12	6.03*
5.	.22	46.54	6.37	48.88	46.34	9.89**
6d.	.19	38.30	10.96	39.47	38.21	0.81
7d.	.19	35.04	14.04	38.73	34.73	5.05*
8d.	.20	26.82	13.96	31.69	26.43	8.62**
9.	.25	46.42	6.02	48.71	46.23	10.44**
10.	.10	41.12	11.13	42.73	40.99	1.48
11d.	.47	28.01	14.21	41.34	26.90	68.84***
12.	.26	46.58	6.71	49.10	46.37	10.37**
13d.	.39	39.30	11.83	45.37	38.80	19.46***
14d.	.30	34.82	11.64	42.73	34.17	34.17***
15d.	.22	43.04	10.26	43.92	42.96	0.52
16d.	.20	38.62	10.75	42.46	38.30	9.34**
17d.	.46	31.61	14.01	42.31	30.74	42.93***
18d.	.24	39.05	10.18	39.40	39.02	0.09

Item No.	r_{iT}	Total Means	Total S. D. s	EP Means	NP Means	F
19d.	.34	38.12	10.82	40.08	37.96	2.33
20d.	.39	42.56	10.92	46.97	42.20	11.78***
21.	.23	43.47	10.00	46.79	43.19	8.08**
22d.	.37	29.09	15.02	38.86	28.29	31.27***
23d.	.25	32.90	13.16	30.53	33.10	2.32
24d.	.37	16.83	14.06	31.31	15.65	81.38***
25.	.20	35.67	12.41	37.27	35.54	1.19
26.	.30	39.84	10.25	45.75	39.34	24.77***
27d.	.24	39.84	11.16	43.33	39.56	7.02**
28.	.21	34.84	13.61	40.75	34.34	13.87***
29.	.24	41.75	8.25	44.40	41.53	7.58**
30.	.30	38.40	10.96	42.39	38.06	9.72**
31.	.14	35.21	12.54	38.97	34.90	6.34*
32d.	.07	18.86	11.80	18.54	18.89	0.05
33d.	.34	30.21	13.28	36.94	29.63	19.08***
34.	.20	40.14	8.43	43.33	39.88	10.33**
35.	.22	44.27	6.20	46.42	44.09	8.75**
36d.	.28	28.91	13.14	34.77	28.42	14.45***
37.	.37	46.63	5.91	48.21	46.50	5.22*
38d.	.37	28.32	13.85	36.12	27.66	23.62***

Item No.	r_{iT}	Total Means	Total S. D. s	EP Means	NP Means	F
39.	.29	37.08	10.85	42.00	36.66	14.74***
40d.	.44	38.00	13.20	46.49	37.29	31.02***
41d.	.29	38.81	12.73	42.46	38.50	6.02*
42.	.27	44.45	7.38	46.82	44.25	7.41**
43.	.27	41.83	9.06	45.60	41.52	12.69***
44d.	.40	22.00	13.53	27.88	21.51	13.69***
45d.	.41	37.17	13.25	42.61	36.71	12.40***
46.	.29	44.39	7.10	46.04	44.25	3.96*
47d.	.37	17.44	12.35	24.46	16.87	23.30***
48.	.20	43.00	9.22	45.45	42.80	5.08*
49.	-.09	30.59	13.21	30.39	30.61	0.02
50d.	.37	32.56	13.94	42.01	31.76	34.70***
51.	.14	38.49	9.98	45.83	37.89	40.33***
52d.	.33	31.00	12.47	29.09	20.33	31.06***
53d.	.41	31.95	13.36	39.23	31.35	21.36***
54.	.15	39.33	10.83	43.41	38.99	10.23**
55d.	.38	35.96	14.06	37.69	35.81	1.10
56.	.31	41.83	9.07	44.39	41.62	5.72*
57.	.26	36.81	10.83	41.06	36.46	11.14***
58d.	.48	23.33	14.89	37.61	22.13	72.29***

Item No.	r_{iT}	Total Means	Total S.D.s	EP Means	NP Means	F
59d.	.32	35.30	13.30	38.69	35.02	4.58*
60.	.17	35.02	9.91	38.00	34.77	6.41*
61d.	.25	40.79	11.41	45.00	40.45	9.79**
62.	.26	45.74	6.07	47.58	45.59	6.57**
63d.	.41	39.83	12.59	38.12	29.17	31.03***
64d.	.38	31.71	14.91	39.24	31.14	18.48***
65.	.08	32.01	13.61	40.91	31.28	31.58***
66d.	.28	23.04	12.72	24.52	22.92	0.93
67d.	.15	24.66	12.86	35.00	24.63	0.05
68d.	.24	37.65	10.60	40.88	37.38	6.56**
69d.	.41	42.08	9.46	44.25	41.90	3.83*
70d.	.03	30.19	13.69	30.64	30.15	0.07
71.	.29	41.72	10.53	46.34	41.34	14.17***
72d.	.34	41.82	10.25	46.89	41.40	17.84***
73d.	.04	12.85	10.27	12.50	12.88	0.08
74d.	.44	36.98	12.38	42.12	36.55	12.48***
75.	.12	30.15	15.47	45.75	28.82	80.76***
Sum 1-75	1.00	2608.69	316.17	2952.27	2580.34	94.68***

Note: On items denoted by "d," scale direction has been reversed to facilitate group comparisons. Raw attitude means may be computed by a procedure described in Footnote 2.

* $p < .05$; ** $p \leq .01$; *** $p \leq .001$